in the assumptions. **CONCLUSIONS:** Compared with usual therapeutic strategies of anemia, the use of intravenous iron appears to be significantly cost saving in chemotherapy-induced anemia in breast cancers and gastrointestinal cancers.

PCN29

TREATMENT OF CHRONIC LYMPHOCYTIC LEUKEMIA (CLL) USING RITUXIMAB (R) WITH FLUDARABINE (F) AND CYCLOPHOSPHAMIDE (C): ASSESSING THE FINANCIAL IMPACT OF THE ROUTE OF ADMINISTRATION AT PRINCESS MARGARET HOSPITAL (PMH)

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OBJECTIVES: The objective of this study was to determine, from the perspective of PMH, the financial impact of treating patients with CLL using R and intravenous FC (R-FC IV) versus R and orally administered FC (R-FC PO). **METHODS:** A cost analysis was performed from the perspective of PMH. All drug and administration costs were obtained from relevant sources in the province of Ontario and validated by PMH. Rituximab dosing was set at 375 mg/m^2 for cycle 1 (day 1) and 500 mg/m^2 of cycles 2-6 (day 1). Intravenous F and C were dosed at 25 mg/m^2 and 250 mg/m^2, respectively, for 6 cycles (days 1-3). Oral dosing of these drugs was set at 40 mg/m^2 and 325 mg/m^2, respectively. Drug utilization was estimated based on a body surface area of 1.8 m^2. **RESULTS:** The cost of R-FC PO at PMH is $32,634 per patient (Drug cost: $29,292; Administration cost: $3,342), while the cost of R-FC IV is $33,400 per patient (Drug cost: $25,192; Administration cost: $8,208). Overall, utilization of R-FC PO is $766, or 2%, less costly than R-FC IV at PMH. Real-world conditions would impact the difference in price between these two options, as patients may tolerate more treatment cycles of one regimen compared to another. The cost of the PO and IV routes of administration may be viewed as functionally equivalent at PMH, making the decision to employ a specific route of administration one that should be based on non-financial criteria. These results should apply to all Canadian hospitals with drug and administration costs that are similar to those found at PMH. **CONCLUSIONS:** This analysis shows that R-FC PO is marginally less expensive than R-FC IV at PMH. Therefore, the choice of format should be made based on patients' individual needs.

PCN30

DOES A LACK OF HTA REVIEW LEAD TO HIGHER PRICES FOR HIV TREATMENTS? A COMPARISON WITH ONCOLOGY TREATMENTS

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OBJECTIVES: Therapies for HIV and cancer draw attention due to both high unmet need and high costs. In some cases, HIV treatments are approaching the prices of cancer treatments. However these disease states are often reviewed differently by payers and HTA agencies. NICE, for example, does not perform HTAs for HIV therapies while other European countries do. We examined the relative differences in prices between HIV and cancer therapies across several European countries to identify the potential impact of HTA reviews. **METHODS:** We included therapies approved for use 2004-2010 in HIV (Atripla, Trizivir, Reyataz, Norvir, Truvada, Invirase, Celsentri, Isentress, Fuzeon) and cancer (Alimta, Avastin, Erbitux, Sutent, Tyverb,Taxotere, Nexavar). Current yearly treatment prices (2010) were identified for all therapies for UK, FR, DE, IT, and ES. Price differentials between the UK and other countries were determined for each treatment. Mean country price differentials (UK reference) were compared. **RESULTS:** HIV therapies were on average 30% (median differential 29%) lower in price in the UK than other countries. Price differentials for HIV therapy ranged from −18% (higher price in UK) to 75% (less expensive in UK). Cancer therapy prices averaged 36% (median 36%) lower in UK than other countries. Price differentials for HIV therapy ranged from 6% to 80% (lower price in UK) with a median of 36%. The apparent discrepancy between mean country differentials was not present if the single HIV therapy was more expensive in the UK than other European countries (Norvir was excluded). **CONCLUSIONS:** Across 9 HIV therapies and 7 cancer treatments, all treatments were on average lower in price in the UK. However, the price differential was not substantially different across the 2 therapy areas. There is little evidence supporting an upward price pressure due to a lack of economic-driven HTA reviews of HIV products when compared to oncology therapies.

PCN31

DIRECT MEDICAL COSTS OF ELDERLY PATIENTS WITH STAGE III COLON CANCER DURING FIRST-LINE VERSUS SECOND-LINE CHEMOTHERAPY

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OBJECTIVES: Economic analyses of stage III colon cancer (CC) treatments should account for multiple lines of chemotherapy, yet little is known about the cost variation between first-line (1stTx) and second-line chemotherapy (2ndTx). This study investigates the direct medical costs of 1stTx and 2ndTx among elderly American patients with stage III CC. **METHODS:** We included patients over 65 years and diagnosed with stage III CC from the 1997-2005 Surveillance, Epidemiology, and End Results (SEER)-Medicare database. 1stTx was defined as any use of 5-fluorouracil/leucovorin-only, oxaliplatin-based, or irinotecan-based chemotherapies; 2ndTx was the chemotherapy following the 1stTx after a therapy gap of at least 12 weeks or a switch in chemotherapy. 1stTx and 2ndTx were examined during the first 40 weeks following chemotherapy initiation. Cost data representing total Medicare reimbursements were used to calculate weekly costs for the first 26 weeks of each treatment. We further examined the cost difference between patients who started 2ndTx early (≤26 weeks) and late (>26 weeks). **RESULTS:** Among 18,378 elderly patients with stage III CC, 57% received 1stTx (n=10,408). Among 1stTx users, 8% (n=870) went on to receive 2ndTx. Average weekly total medical costs for 1stTx varied between $647 and $1,493 (mean±SD=$895±166) while these for 2ndTx were higher, ranging from $752 to $2,041 (mean±SD=$1,046±286). Furthermore, average weekly total medical costs of 2ndTx in patients who started 2ndTx early ranged from $900 to $2,093 (mean±SD=$1,251±318), reflecting higher costs than among late 2ndTx users, whose costs ranged from $767 to $1,483 (mean±SD=$1,011±226). **CONCLUSIONS:** Average weekly total medical costs of stage III CC patients were higher for 2ndTx than 1stTx. Early 2ndTx initiators also had higher average weekly total medical costs than late 2ndTx users. Findings suggest that direct medical costs of stage III CC patients are lower when they are on first-line than second-line chemotherapy.

PCN32

COMPARISON OF EPOETIN ALFA AND DARBEPOETIN ALFA DOSING PATTERNS AND COSTS IN CHRONIC KIDNEY DISEASE AND CHEMOTHERAPY-INDUCED ANEMIA OUTPATIENTS

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OBJECTIVES: To compare erythropoiesis-stimulating agent (ESA) dosing patterns and costs in outpatients with chronic kidney disease (CKD) not on dialysis or with chemotherapy-induced anemia (CIA). **METHODS:** Electronic records from the Premier Perspective Comparative Hospital Database (2006Q1-2009Q3) were analyzed to identify outpatients ≥18 years old treated with epoetin alfa (EPO) or darbepoetin alfa (DARB). Patients receiving renal dialysis or treated with both ESAs were excluded. CKD patients had ≥1 claim for CKD, no claim for cancer, and did not receive chemotherapy. CIA patients had ≥1 claim for cancer, received chemotherapy, and had no claim for CKD. The mean cumulative ESA dose was used to calculate costs, based on April 2010 wholesale acquisition costs (EPO: $15.15/1,000 Units, DARB: $4.96/mcg). **RESULTS:** A total of 11,012 CKD (EPO: 6,921; DARB: 4,091) and 5,590 CIA (EPO: 2,856; DARB: 2,734) outpatients were identified. EPO patients were slightly younger than DARB patients in the CKD group (years: 71.0 vs. 71.6; P=.0341) and of similar age in the CIA group (years: 62.2 vs. 62.7; P=.1316). The proportion of females was higher in CKD (EPO 62.2% vs. DARB 58.8%; P=.0003) and smaller in CIA (EPO 63.4% vs. DARB 67.0%; P=.0047). The mean treatment duration was slightly longer for EPO CKD patients (months: 3.6 vs. 3.4, P=.0004) and similar for CIA patients (months: 2.6 vs. 2.5; P=.1816). The mean cumulative dose was EPO 137,101 Units and DARB 533 mcg in CKD, and EPO 221,652 Units and DARB 933 mcg in CIA, yielding dose ratios of 257:1 and 238:1 (Units EPO:mcg DARB), respectively. Corresponding ESA costs were higher for DARB than for EPO in both populations (CKD: $2,644 vs. $2,077; CIA: $4,627 vs. $3,358). **CONCLUSIONS:** This analysis reported dose ratios of 257:1 and 238:1 in CKD and CIA outpatients, respectively. DARB price premiums of 27% for CKD and 38% for CIA patients were observed.

PCN33

COST SAVINGS ASSOCIATED WITH TRANSFUSION INDEPENDENCE IN PATIENTS WITH MYELODYSPLASTIC SYNDROME WITH A 5Q- DELETION

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OBJECTIVES: Red blood cell transfusion is the standard of care for many patients with myelodysplastic syndrome (MDS) in the US. Transfusions are economically burdensome due to the costs associated with the transfusions including iron chelation therapy (ICT). This study aimed to investigate potential cost savings associated with transfusion independence as a result of lenalidomide use. **METHODS:** A one-year simulation model was constructed to estimate the relevant costs of using lenalidomide compared to transfusions in the treatment of MDS patients with a 5q-deletion and transfusion-dependent anemia. A two arm model was constructed to simulate patients through the costs of lenalidomide vs. transfusions. Patients were assigned initial transfusion and ICT requirements, response status, risk of infection, death, progression to acute myeloid leukemia (AML), and iron overload complications (IOC) based on data from a clinical trial and existing literature. Patients who became transfusion independent were subject to lower risk of infection, death, progression to AML and elimination of ICT. Dosing frequency and modification of lenalidomide was simulated based on results of the MDS-003 clinical trial. Treatment guidelines also served as a basis of assumptions when required. Resource use and cost data (in 2010 US dollars) were obtained from US databases and available literature. **RESULTS:** In a scenario where it was assumed that patients became transfusion independent with lenalidomide use, a patient's cost was $119,186 inclusive of the cost of lenalidomide, whereas the costs for a transfusion dependent patient were $77,729. In this scenario, patients receiving lenalidomide experienced reduced infections, IOCs, progression to AML and ICT compared to patients treated with transfusions. **CONCLUSIONS:** In the US, treating MDS patients with transfusion-dependent anemia and a 5q-deletion with lenalidomide results in cost savings due to a reduction in costs from transfusion related complications. These savings serve to largely offset lenalidomide treatment costs.

PCN34

LONG-TERM DIRECT MEDICAL COSTS IN PATIENTS DIAGNOSED WITH FOLLICULAR LYMPHOMA WHO RECEIVE FRONTLINE CHEMOTHERAPY WITH VERSUS WITHOUT RITUXIMAB - A SEER MEDICARE ANALYSIS

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OBJECTIVES: To compare long-term costs to Medicare in patients diagnosed with follicular lymphoma (FL) receiving frontline chemotherapy +/- rituximab.